

This listing of the claims replaces all prior versions of claims in the application:

Listing of Claims:

1. (Currently amended) An electrosurgical pencil, comprising:

an elongated housing having a blade receptacle provided at a distal end thereof;

an electrocautery blade supported within the blade receptacle, the blade having a distal end extending distally from the housing and a proximal end extending into the housing;

an activation button electrically coupled to the blade; [[and]]

a strain gauge affixed to the electrocautery blade for measuring a displacement of the blade, wherein the strain gauge is sensitive to a temperature change associated with the electrocautery blade; and

a compensator resistor operatively connected to the strain gauge, wherein the compensator resistor is configured to compensate for changes in temperature of the electrocautery blade that effect the strain gauge.

2. (Original) An electrosurgical pencil according to claim 1, wherein the activation button is supported on the housing.

3. (Original) An electrosurgical pencil according to claim 1, wherein the strain gauge is affixed to a proximal end of the electrocautery blade.

4. (Original) An electrosurgical pencil according to claim 1, further comprising: a meter which is at least one of electrically and optically connected to the strain gauge for monitoring at least one of a change in voltage, a change in electrical current and a change in optical wavelength.

5. (Original) An electrosurgical pencil according to claim 4, wherein the strain gauge is one of a wire, a foil, a semiconductor material and an optical transducer.

6. (Currently amended) An electrosurgical pencil according to claim 5, wherein the ~~strain gauge includes~~ a temperature compensator resistor is electrically coupled to one of the strain gauge or a temperature compensated transducer, the compensator resistor being configured and adapted to compensate for displacement variations due to changes in temperature.

7. (Original) An electrosurgical pencil according to claim 5, wherein the semiconductor material is a piezoresistive material.

8. (Original) An electrosurgical pencil according to claim 1, further comprising: means for producing a signal when the strain gauge measures a displacement of the blade which satisfies a predetermined level.

9. (Original) An electrosurgical pencil according to claim 8, wherein the means for producing a signal include a feedback system which produces at least one of an audible and a visible signal.

10. (Currently amended) An electrosurgical instrument, comprising:

a housing;

an electrocautery blade supported within the housing and extending partially therefrom, the blade being coupled adapted to connect to an electrosurgical generator which provides electrosurgical energy to the blade;

an activation switch coupled to the generator which permits selective activation of the electrocautery blade; [[and]]

a strain gauge in communication with the electrocautery blade for measuring a displacement of the electrocautery blade, wherein the strain gauge is sensitive to a temperature change associated with the electrocautery blade; and

a compensator resistor operatively connected to the strain gauge, wherein the compensator resistor is configured to compensate for changes in temperature of the electrocautery blade that effect the strain gauge.

11. (Original) An electrosurgical instrument according to claim 10, further comprising means for monitoring at least one of a voltage, an electrical current and an optical wavelength passing through the strain gauge.

12. (Original) An electrosurgical instrument according to claim 10, further comprising means for monitoring at least one of a change in voltage, a change in electrical current and an optical transducer.

PATENT APPLICATION
Attorney Docket: 2854 (203-3081 PCT US)

13. (Original) An electrosurgical instrument according to claim 10, wherein the strain gauge is one of a wire, a foil, a semiconductor material and an optical transducer.

14. (Original) An electrosurgical instrument according to claim 10, further comprising: means for producing a signal when the strain gauge measures a displacement of the blade which satisfies a predetermined level.

15. (Original) An electrosurgical instrument according to claim 10, wherein the electrosurgical instrument is an electrosurgical pencil having an elongate housing.

16. (Currently amended) An electrosurgical instrument according to claim 10, further comprising: a signal producing device configured and adapted to produce a signal when the strain gauge measures a displacement of the electrocautery blade, the electrocautery blade providing a sensory input to ~~the electrosurgical generator~~ a control circuitry of the electrosurgical generator which in turn modifies the generator output waveform.

17. (Currently amended) An electrosurgical instrument according to claim [[10]] 16, further comprising: a wherein the control circuit is electrically coupled between the electrocautery blade and the electrosurgical generator, the control circuit being configured and adapted to control power supplied to electrocautery blade based on the displacement measured by the strain gauge.

18. (Original) An electrosurgical instrument according to claim 17, wherein the control circuit increases the power supplied to the electrocautery blade when the

displacement of the electrocautery blade measured by the strain gauge is greater than a preset value and decreases the power supplied to the electrocautery blade when the displacement of the electrocautery blade measured by the strain gauge is less than a preset value.

19. (New) An electrosurgical instrument, comprising:

a housing;

an electrocautery blade supported within the housing and extending partially therefrom, the blade adapted to connect to an electrosurgical generator which provides electrosurgical energy to the blade;

an activation switch coupled to the generator which permits selective activation of the electrocautery blade;

a strain gauge in communication with the electrocautery blade for measuring a displacement of the electrocautery blade; and

a drag evaluation circuit operatively connected to the strain gauge, wherein the drag evaluation circuit receives electrical signals from the strain gauge, compares said electrical signals against known values, and transmits a corresponding evaluation signal to an electrosurgical generator, wherein the electrosurgical generator adjusts at least one parameter to compensate for at least one of an increase, a decrease and a non-change in displacement of the electrocautery blade.